

**Specifications for WS501 Weather Station: Brand name or Equal**  
**Acceptable in accordance with the following specifications:**

**Temperature**

Measuring range -58...140°F (-50...60°C)

Accuracy  $\pm 0.2^{\circ}\text{C}$  (-4...122°F/ -20°C...+50°C), otherwise  $\pm 0.5^{\circ}\text{C}$  (>-22°F/-30°C)

Relative humidity

Principle capacitive

Measuring range 0...100% RH

Accuracy  $\pm 2\%$  RH

**Radiation**

Response Time (95%) 18s

Non-stability (change/year)  $\pm 1\%$

Non-linearity (0 to 1,000 W/m<sup>2</sup>)  $\pm 2.5\%$

Directional error (at 80° with 1,000W/m<sup>2</sup>)  $\pm 20\text{W/m}^2$

Temperature dependence of sensitivity  $\pm 5\%$  (-10 to +40°C)

Tilt error (at 1,000W/m<sup>2</sup>)  $\pm 3\%$

Spectral range (50% points) 300 to 2,800nm

Typical signal output for atmospheric applications 0 to 20mV

Operating temperature -40 to +80°C

Maximum irradiance 1,500W/m<sup>2</sup>

**Air Pressure**

Principle MEMS capacitive

Measuring range 300...1200 hPa

Accuracy  $\pm 0.5\text{hPa}$

Wind direction

Principle Ultrasonic- 2.4 Ghz